times on overtopped trees, yet in a few cases they were observed also on lateral branches. Three-leaved clusters are apparently commoner on the Coastal Laboratory grounds than 2-leaved and, indeed, from the observations made, it seems that 4-leaved clusters are more numerous here than 2-leaved. In the case of one 1.4-m tree needles were found in clusters of 3, of 4, and of 5, and in addition there were

a few isolated long leaves of the primary type.

The occurrence of 4-leaved or 5-leaved fascicles in Monterey pine is not mentioned as a possibility by Sudworth, Jepson, Sargent, or Abrams, although 4-leaved clusters are not unknown in other American species of the genus, and are in some cases normal. Five-leaved clusters, also, have been reported for one or two pitch pine species. Sudworth, for example, mentions 4- and 5-needled clusters in Pinus ponderosa Laws.. which usually has 3- or (according to Sargent) sometimes 2-needled clusters.

It appears that the occurrence of 4- and 5-leaved fascicles has not been previously reported for Monterey pine. And furthermore, 4-leaved clusters seem to be relatively rare among the pines of the United States. From the fact, however, that such a condition has been observed in the case of another normally 3- and 2-needled pine it is not entirely surprising that it should be found in this species. Still, it is to be borne in mind that the range of P. ponderosa is far more extensive than that of P. radiata and greater variation would accordingly be expected in the former species.

Carnegie Institute of Washington, September 4, 1931.

BIOGRAPHICAL NOTICE OF IDA MAY BLOCHMAN

ETHEL K. CRUM

Ida May Twitchell was born April 11, 1854 at Bangor, Maine. She resided in Iowa from 1857 to 1830, and in 1878 graduated with high honors from the State College at Ames. In 1880 she removed to Santa Maria, California, where she taught first in the elementary schools, later, from 1896 to 1909 in the Santa Maria Union High School. Her marriage to Lazar E. Blochman took place at Santa Maria in 1888. Mrs. Blochman's death occurred August 1, 1931 at Berkeley of which she had been a resident since 1909.

For botany, which was her favorite subject at college, Mrs. Blochman retained a keen and life-long interest. In 1893 she sent a series of articles on the native economic plants to Erythea which the youthful editor captioned under the title "California Herb Lore." Another series on "The Wild Flowers of California" appeared in 1896 in "El

¹ Sudworth, G. B. Forest trees of the Pacific Slope. U. S. Dept. of Agr. Forest Service. 1908.

² Jepson, W. L. Silva of California. Memoirs of the Univ. of California, vol.

² Jepson, W. L. Silva of California. Memoirs of the Univ. of California, vol. 2, 1910; *ibid*. Manual of the flowering plants of California. Berkeley, Calif. 1923, 1925.

³ Sargent, C. S. Manual of the trees of North America. Boston, Mass. 1922. ⁴ Abrams, L. Illustrated flora of the Pacific States, vol. 1, 1923.

Barbareño" published at Santa Barbara. Her botanical collection of 600 numbers of native plants from northern Santa Barbara County was exhibited at the World's Fair in Chicago in 1893 and is now the property of Northwestern University. She sent a number of plants from her region to Professor E. L. Greene of the University of California who named for her as new Senecio Blochmanae collected along the Santa Maria River (Erythea 1:7,—1893). For many years Mrs. Blochman was a member of the California Botanical Society. Her paper on "The Medicinal Uses of Native Plants by California Indians," a subject which claimed much of her interest during recent years, was read before the Society February 23, 1929. As head of the wild flower section of the College Woman's Club of Berkeley, Mrs. Blochman for several years conducted weekly classes in botany and was in charge of the annual wild flower exhibit.

In addition to her scientific interests Mrs. Blochman was closely associated with civic and educational affairs both in Santa Maria and, later, in Berkeley. She was for nineteen years president of the Berkeley Charity Commission, and for eight years a member of the Berkeley Board of Education. With the intellectual alertness so ably devoted to community and scientific work, Mrs. Blochman combined versatility, sincerity and personal charm which will long be remembered by her

many friends.

OPEN LETTERS

Cupressus macnabiana.

The enclosed specimen was collected by Ranger W. Brokenshire in sec. 5, township 27 n., range 3 east, near the Mill Creek rim, eastern Tehama County. I believe it to be Cupressus macnabiana var. bakeri according to your description. We have several "islands" of McNab Cypress scattered throughout the forest but this specimen is from an area at least twenty miles from the nearest island.—C. S. Robinson, Susanville, Dec. 3, 1930.

Cupressus bakeri has more slender branchlets than in your specimen of Cupressus from Mill Creek rim by W. Brokenshire. C. bakeri, too, has very small cones with slender reduced horns. The bark of C. bakeri is scaly or flaky and reveals a bright cherry-red underbark. The bark in your specimen is roughly fissured and dark brown. The Mill Creek specimen is, I think, rather nearer Cupressus macnabiana of the Coast Ranges than it is to specimens of that species from other stations in the Sierra Nevada that I know.

There has now been received your map, showing known locations of "islands" of Cupressus macnabiana in the Lassen Forest, namely, 1. West of Burney Spring 3½ miles, at 5200 feet. 2. West of Tamarack Peak 1½ miles at 6200 feet. 3. Mill Creek rim at 2000 feet. 4. Near Magalia, 4000 feet. The above order of stations is from seath to a Will Lagrangian.

north to south,—W. L. Jepson.